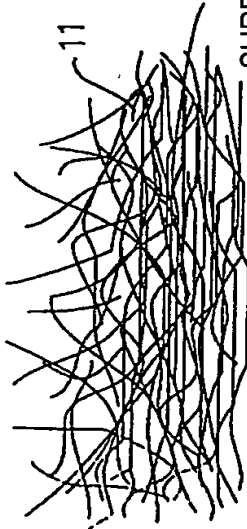


FIG. 1(a)

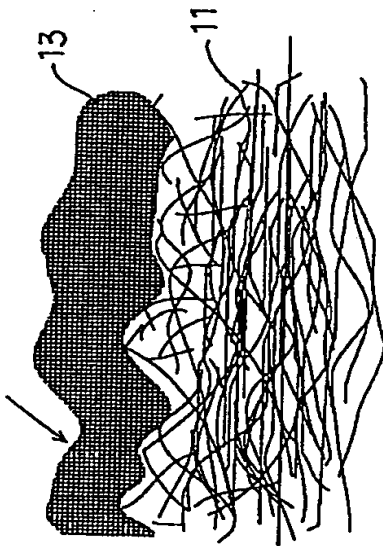
FIBER SURFACE PORTION



ONLY FLAME SPRAY
(Related Art)



FLAME SPRAYED FILM LAYER



SURFACE HARDENING MATERIAL

+ FLAME SPRAY

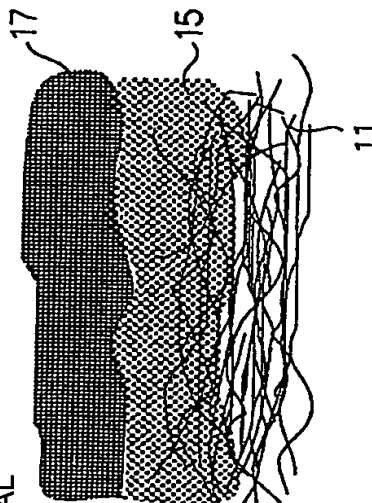
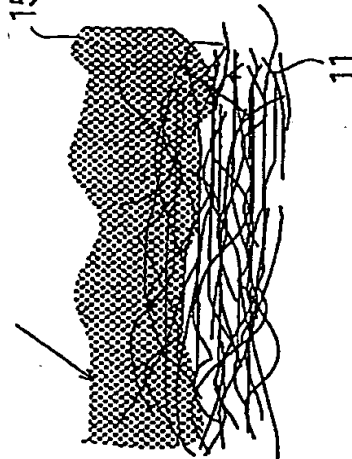


FIG. 1(c)

FIG. 1(d)

FIG. 2

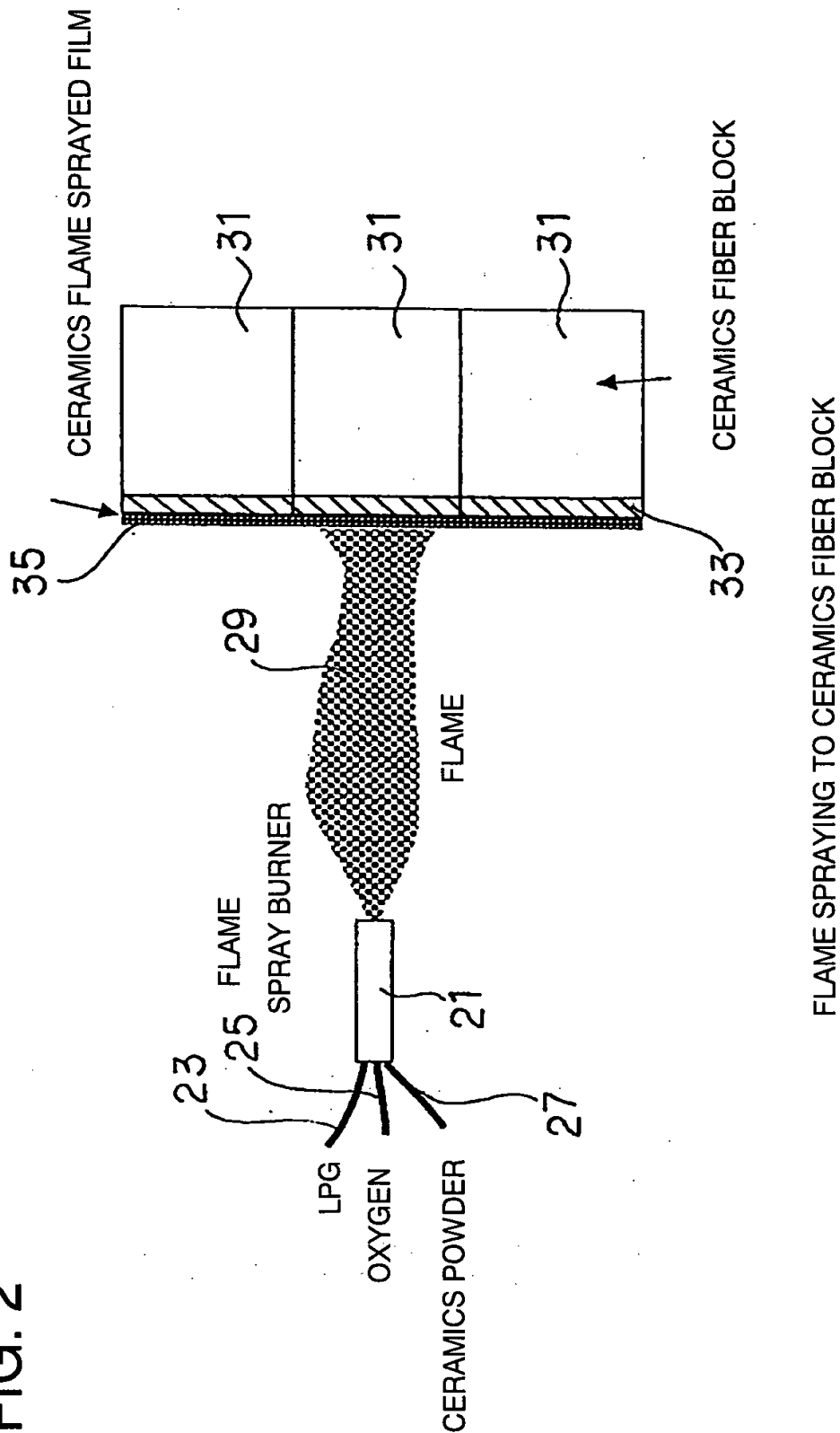


FIG. 3(a)

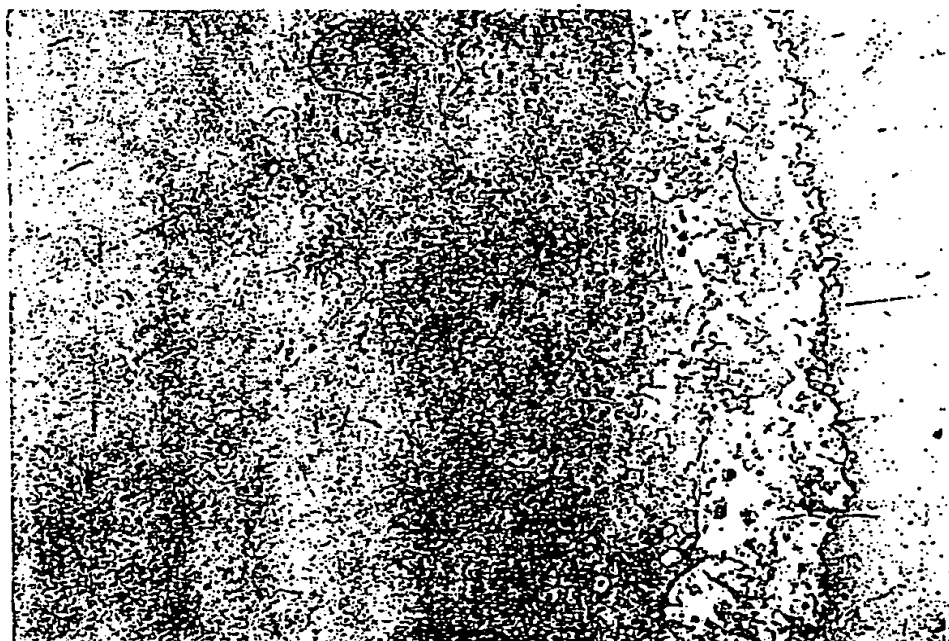


CERAMICS FIBER LAYER

SURFACE HARDENED LAYER

FLAME SPRAYED LAYER(S)

FIG. 3(b)



CERAMICS FIBER LAYER

FLAME SPRAYED LAYER(S)